

UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS: WELL LOG: ELECTRIC LOGS FILE **X** WATER SANDS LOCATION INSPECTED SUB. REPORT/abd.DATE FILED **3-11-91**LAND: FEE & PATENTED **X** STATE LEASE NO.

PUBLIC LEASE NO.

INDIAN

DRILLING APPROVED: **3-29-91 (CAUSE NO. 139-42)**

SPUDDED IN:

COMPLETED: **12-9-92 LA** PUT TO PRODUCING:

INITIAL PRODUCTION:

GRAVITY A.P.I.

GOR:

PRODUCING ZONES:

TOTAL DEPTH:

WELL ELEVATION:

DATE ABANDONED:

LA'D APP EXPIRED 12-9-92

FIELD:

ALTAMONT

UNIT:

COUNTY:

DUCHESNE

WELL NO.

HARTMAN 4-31A3**API NO. 43-013-31308**LOCATION **2469' FNL** FT. FROM (N) (S) LINE. **1037' FWL**

FT. FROM (E) (W) LINE.

SW NW

1/4 - 1/4 SEC.

31

TWP.	RGE.	SEC.	OPERATOR	TWP.	RGE.	SEC.	OPERATOR
1S	3W	31	PENNZOIL EXPL. & PROD.				

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

(Other instructions on reverse side)

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work

DRILL ☒DEEPEN ☐PLUG BACK ☐

5. Lease Designation and Serial No.

Fee Land

6. If Indian, Allottee or Tribe Name

7. Unit Agreement Name

8. Farm or Lease Name

Hartman

9. Well No.

4-31A3

10. Field and Pool, or Wildcat Altamont
Bluebell, Upper Green River11. Sec., T., R., M., or Blk. and Survey or Area Lot 2 055

Sec. 31 T1S R3W

12. County or Parrish 13. State

b. Type of Well

Oil Well ☒Gas Well ☐

Other

Single Zone ☒Multiple Zone ☐

2. Name of Operator

Pennzoil Exploration and Production Company

3. Address of Operator

P.O. Box 290 Neola, Utah 84053

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface

2469' FNL and 1037' FWL

At proposed prod. zone

Same

14. Distance in miles and direction from nearest town or post office*

1.5 miles southeast of Altamont, Utah

15. Distance from proposed*

location to nearest property or lease line, ft. (Also to nearest drlg. line, if any)

1037' FWL

16. No. of acres in lease

640

17. No. of acres assigned to this well

640

18. Distance from proposed location*

to nearest well, drilling, completed, or applied for, on this lease, ft. Wasatch - 600'

19. Proposed depth

8700'

20. Rotary or cable tools

Rotary

21. Elevations (Show whether DF, RT, GR, etc.)

Ungraded Ground - 6314'

22. Approx. date work will start*

After 3-18-91

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
11"	8 5/8"	28#	3000'	1550 cuft
7 7/8"	5 1/2"	17#	8700'	

TECHNICAL REVIEW

Engr. JM 3-27-91Geol. JL 3/27/91Surface JA 3/15/91

1. Enclosed Attachment: a. Certified Location Plat.
b. Drilling Plan.
c. BOP Schematic
d. Map showing roadway to wellsite.
e. Schematic of location and rig layout on wellsite.

2. Water permit will be secured prior to spud.

3. An AFE has been prepared and a copy has been sent to joint holders for their approval.

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OIL GAS & MINING

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

Danny L. Laman Phone: Office: (801) 353-4397 Home: (801) 789-7033

Signed Danny L. LamanTitle Drilling ForemanDate 3-8-91

(This space for Federal or State office use)

Permit No.

43-013-31308

Approval Date

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING

Approved by

Title

Conditions of approval, if any:

DATE:

3-29-91

BY:

JRMWELL SPACING: 139-42

*See Instructions On Reverse Side

T1S, R3W, U.S.B.&M.

PENNZOIL EXPLR. & PROD. CO.

Well Location, HARTMAN #4-31A3, located as shown in the LOT 2 of Section 31, T1S, R3W, U.S.B.&M. Duchesne County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE WEST 1/4 CORNER OF SECTION 31, T1S, R3W, U.S.B.&M. TAKEN FROM THE ALTAMONT QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6317 FEET.

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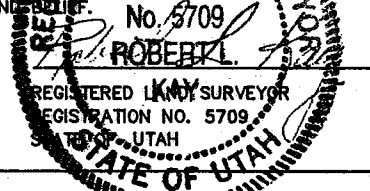
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OIL GAS & MINING**



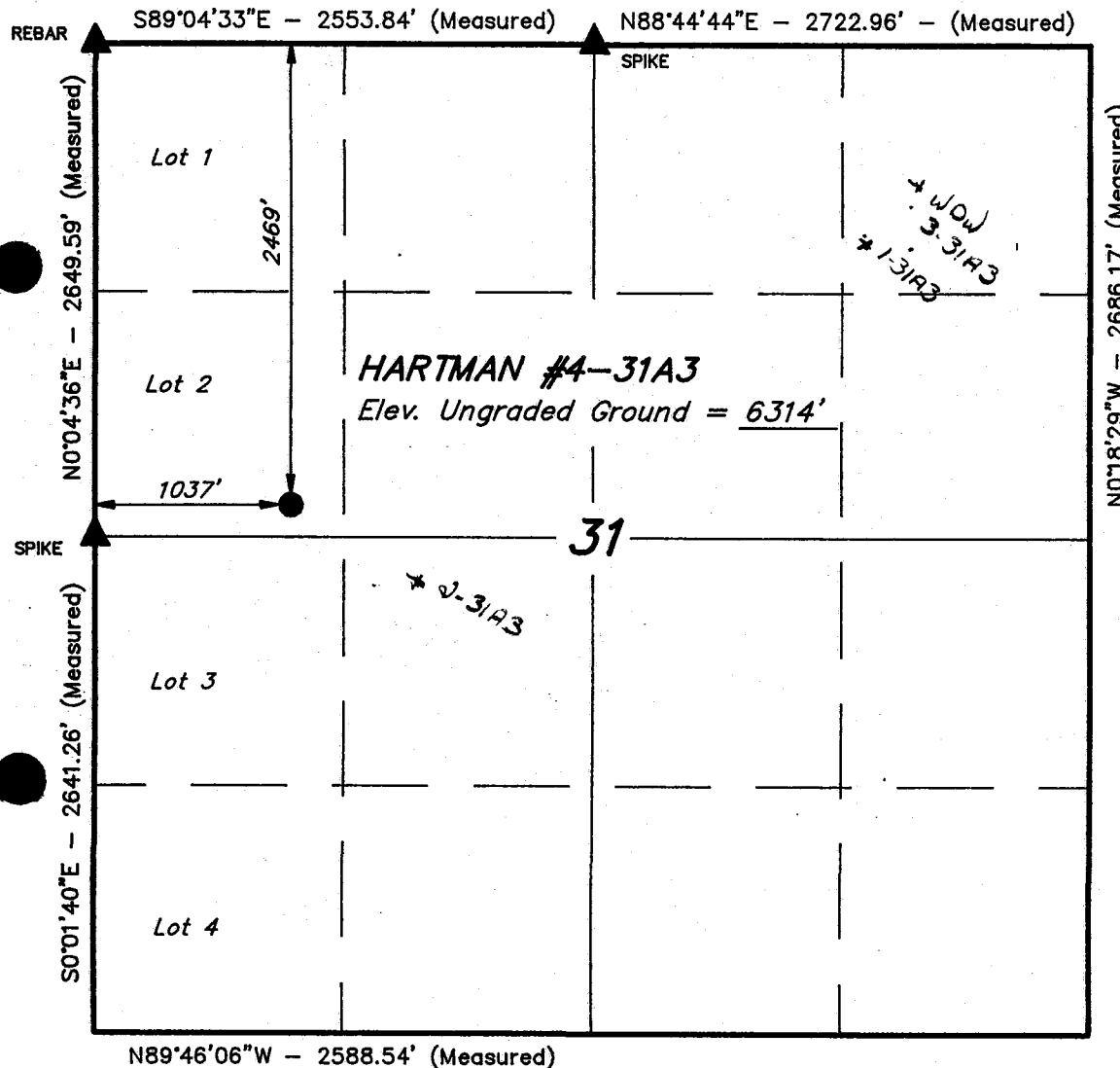
CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEY MADE BY ME OR UNDER SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



UINTAH ENGINEERING & LAND SURVEYING
P. O. BOX 1758 - 85 SOUTH - 200 EAST
VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 12-22-90
PARTY L.D.T. G.T. T.D.H.	REFERENCES PREVIOUS BREAKDOWN
WEATHER COLD	FILE PENNZOIL EXPLR. & PROD. CO.



NOTE:

WELL BEARS N81°00'06"E
1050.5' FROM THE WEST 1/4
CORNER OF SECTION 31.

▲ = SECTION CORNERS LOCATED.

DRILLING PLAN

OPERATOR: PENNZOIL EXPLORATION & PRODUCTION COMPANY
WELL: Hartman 4-31A3
WELL LOCATION: 2469 FNL & 1037 FWL
SWNW SEC. 31 T1S R3W
DUCHESNE COUNTY, UTAH

1&2. ESTIMATED TOPS AND IMPORTANT GEOLOGICAL FORMATIONS:

Duchesne River	at surface (surface formation)
Uinta	near the surface
Green River	5946
Green River TG-2	6728
Trona I	7610
Mahogany Bench	8560
Total Depth	8700

3. ESTIMATED OIL AND WATER DEPTHS:

Water	NONE ANTICIPATED
Top of Green River	Oil @ 6100+-
Green River TG-2	Oil @ 6728+-
Mahogany Bench	Oil @ 8560+-

4. HOLE SIZE, CASING, AND CEMENT PROGRAM:

- a. CONDUCTOR HOLE: 0 - 60'+
 - a. Drill a 26" hole to 60' with rat hole machine.
 - b. Set 14" conductor pipe.
 - c. Cement with ready mix concrete at six bags per yard.
- b. SURFACE HOLE: 60' - 3000':
 - a. Drill a 11" hole to 3000'.
 - b. Set 3000' of 8 5/8" 28# S-80 STC.
 - c. Cement: Low density filler to surface,
Tail-in with 200 sacks Class "G".
- c. PRODUCTION HOLE: 3000 - 8700'
 - a. Drill a 7 7/8" hole to 8700'
 - b. Set 8700' of 5 1/2" 17# WC-70 LTC.
 - c. Cement: Low density filler from surface to 5500
Tail-in from TD to 5500' with a 50/50
Poz "G", tailored for depth and temp.

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OIL GAS & MINING

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5. PROPOSED DRILLING FLUID PROGRAM:

- a. Surface Hole: Spud with a gelled fresh water with a 36 viscosity to 300'. Then continue drilling through the reserve pit with fresh water, using lime and flocculent to keep water clean.

Should a water flow be encountered, it will be contained and drilling will resume.

- b. Production hole: Start drilling this interval with fresh water circulating the reserve pit. Use viscous sweeps to keep the wellbore clean and a flocculent to keep the water clean.

Should well bore condition dictate, mud up will be with a polymer. Salt will be used for weight material.

Final fluid properties: 8.8 ppg. \pm salt water.

6. OPERATOR'S PRESSURE CONTROL PLAN:

Figure no. 1 is a schematic of minimum BOP equipment.

The BOP equipment will be nipped up on the surface casing and pressure tested prior to drilling out:

- a. All rams and choke manifold will be tested to 3000 psi.
- b. Bag preventor will be tested to 50% of its rated working pressure.
- c. All casing strings will be tested to 1500 psi. or 0.2 psi/ft per depth, whichever is greater.
- d. Record all BOP test on tour reports.
- e. Retest BOP stack every 28 days.
- f. Fill up line above the bag preventer.
- g. Kill line located below the BOP rams.

Operational Checks:

- a. Pipe rams will be closed and opened once each 24 hours.
- b. Blind rams will be closed and opened each time the drill string is pulled from the well bore.

7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:

- a. Upper and lower kelly cocks will be utilized.
- b. A full opening drill pipe stabbing valve.
- c. Visual inspection will be used to monitor the mud system.

8. WELL BORE EVALUATION:

- a. CORING None
- b. DRILL STEM TESTING None
- c. LOGS: Surface hole None
- Production hole Dual Induction Lateral
Gamma Ray
Formation Density
BHC-Sonic Micro-SFL
Four Arm Caliper
- d. COMPLETION: The objective formation is one of the oil zones in the upper Green River.
Selected intervals will then be perforated and evaluated for stimulation work.

9. PRESSURE AND TEMPERATURES:

- a. No abnormal pressure or temperature have been noticed or reported in wells drilled in this area.
- b. Estimated bottom hole temperatures : 145 degrees
- c. Estimated bottom hole pressure: 4000 psi

10. ANTICIPATED STARTING DATE:

- a. Construction will probably start within 10 days of permit approval.
- b. The well will probably be spudded within 5 days of well site completion.

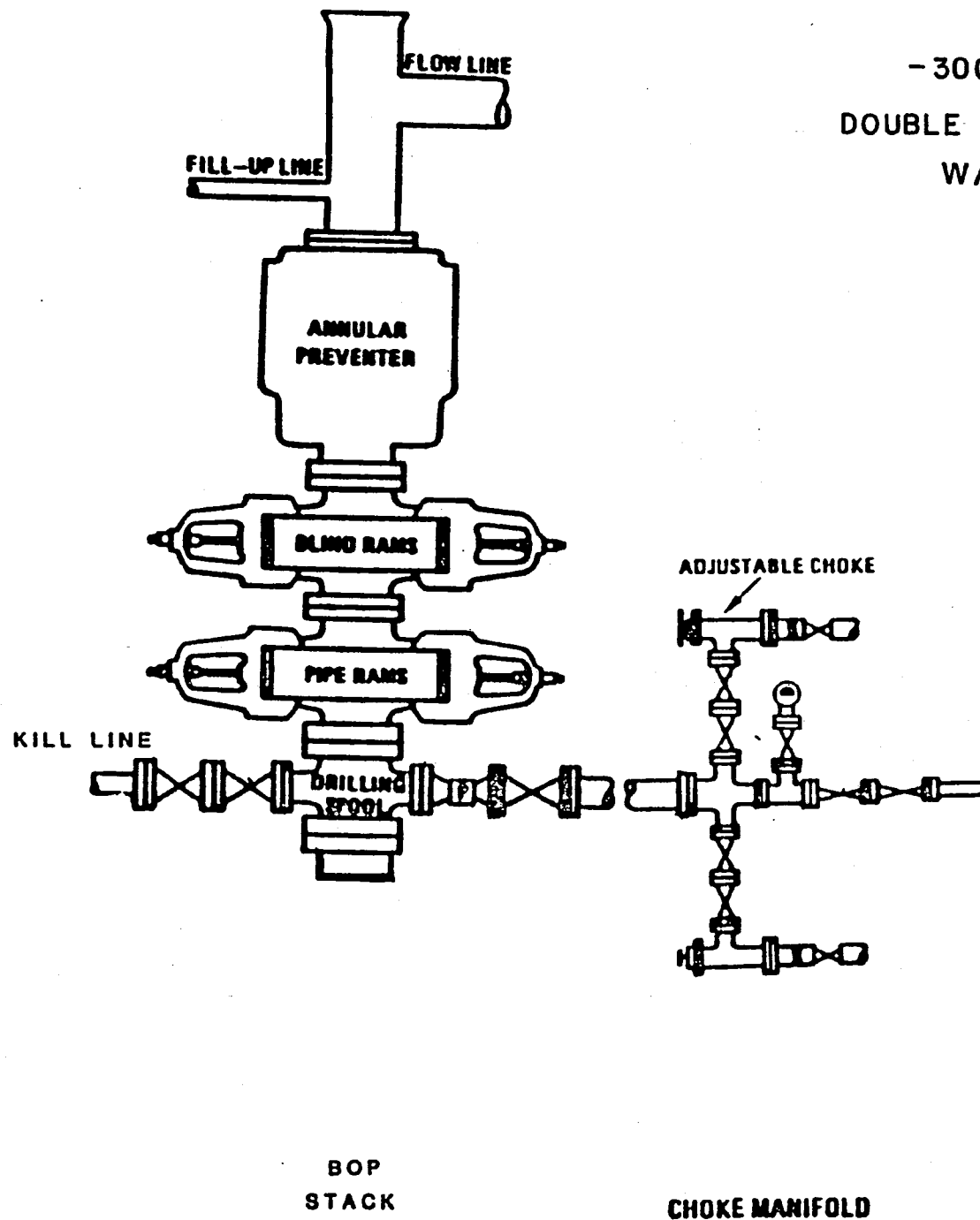
11. OTHER INFORMATION:

- a. Topography: Fenced, flat crop land
- b. Soil Characteristics: Bentonitic clays and rocks
- c. Flora: Cultivated alfalfa
- d. Fauna: Domestic - cattle
Wildlife - Deer, Grouse, Rodents
- e. Surface Use: Cultivation and grazing
- f. Surface Owner: Bruce Hartman (801) 454-3321
- g. Archeological or Historical Sites: None

12. LEASEE'S OR OPERATOR'S REPRESENTATIVE:

George P. SanFilippo, Vice President of Western Operations
Danny L. Laman, Drilling Foreman (801) 353-4397

- 13. This well will be drill per regulations as set forth by the State of Utah Natural Resource Oil, Gas, & Mining Division.

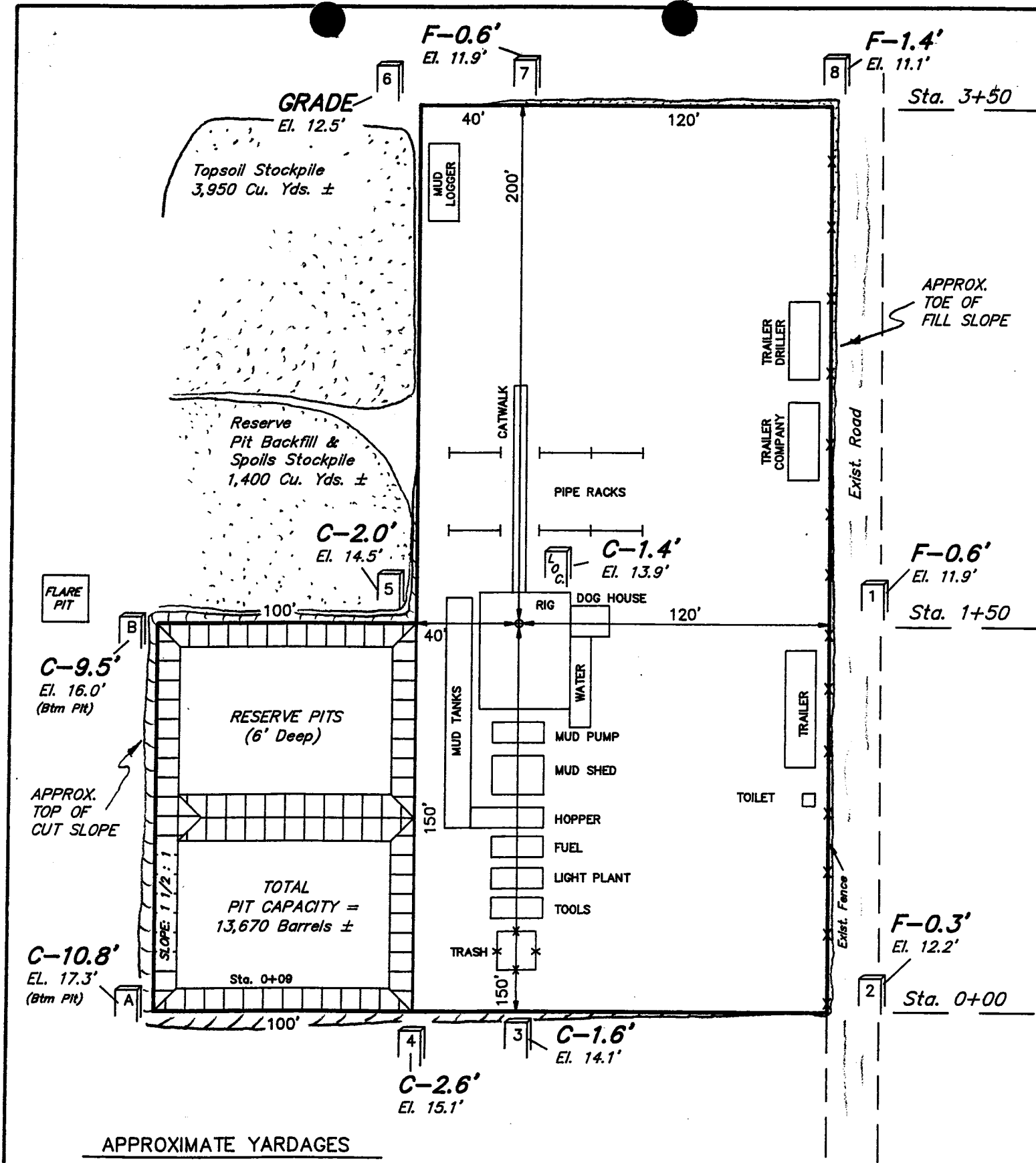


BOP SCHEMATIC
-3000 PSI - WORKING PRESSURE
DOUBLE GATE - BAG TYPE - BOP STACK
W/ MANUAL CHOKE MANIFOLD
for:
HARTMAN 4-31A3

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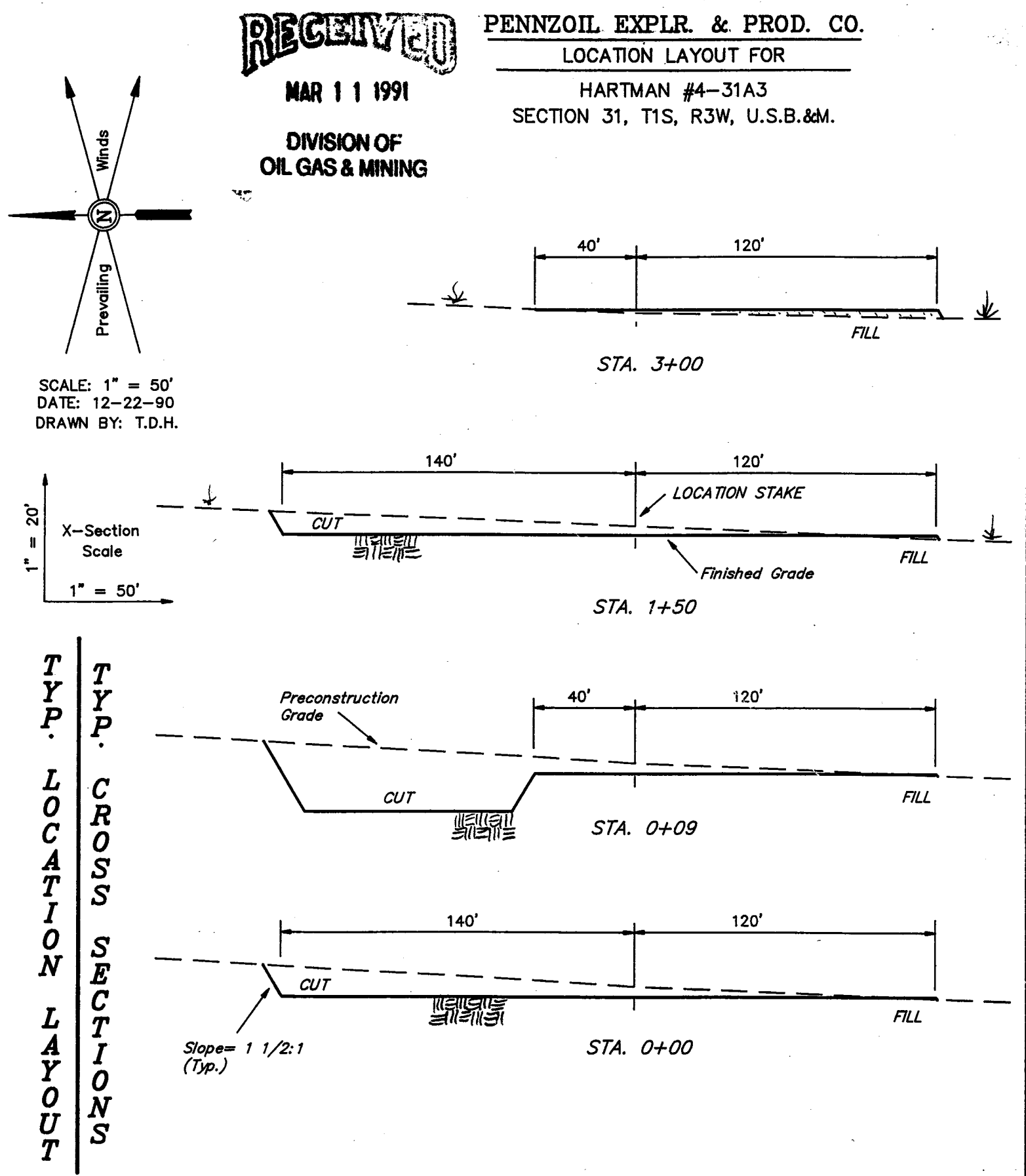
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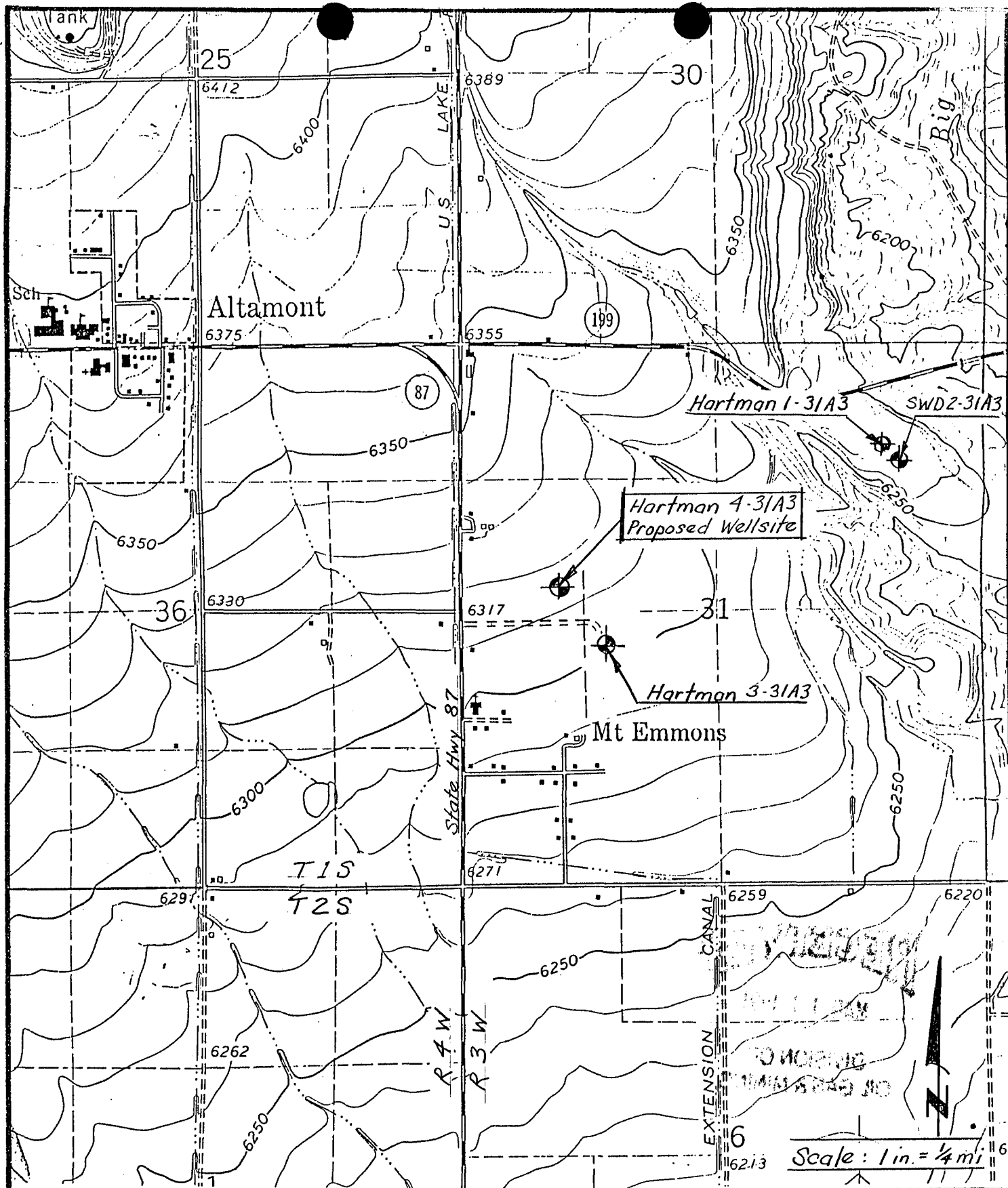
APPROXIMATE YARDAGES

CUT	
(18") Topsoil Stripping	= 3,950 Cu. Yds.
Remaining Location	= 4,030 Cu. Yds.
TOTAL CUT	= 7,980 Cu. Yds.
FILL	= 2,500 Cu. Yds.

EXCESS MATERIAL AFTER 5% COMPACTION	
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 5,210 Cu. Yds.
EXCESS UNBALANCE (After Rehabilitation)	= 140 Cu. Yds.



Elev. Ungraded Ground at Location Stake = 6313.9'
 Elev. Graded Ground at Location Stake = 6312.5'



HARTMAN 4-31A3 PROPOSED WELLSITE
 Section 31, T1S, R3W, Duchesne County, Utah.
 Area Topography Map

Submitted To: Utah Div. Oil, Gas, & Mining Submitted By: Pennzoil Company
 DRL 12/21/90

DRILLING LOCATION ASSESSMENT

State of Utah Division of Oil, Gas and Mining

OPERATOR: PENNZOIL E & P COMPANY WELL NAME: HARTMAN 4-31A3
SECTION: 31 TWP: 1S RNG: 3W LOC: 2469 FNL 1037 FWL
QTR/QTR SW/NW COUNTY: DUCHESNE FIELD: BLUEBELL
SURFACE OWNER: BRUCE HARTMAN
SPACING: 460 F SECTION LINE 460 F QTR/QTR LINE 920 F ANOTHER WELL
INSPECTOR: BRAD HILL DATE AND TIME: 1/4/91 11:30

PARTICIPANTS: Don Langford-Pennzoil, Gil Mitchell-Mitchell
Const., Tracey Monks-Monks Const.

REGIONAL SETTING/TOPOGRAPHY: The proposed well is located in the west-central Uinta Basin, southeast of Altamont, Utah. It is in a fairly flat agricultural area.

LAND USE:

CURRENT SURFACE USE: The proposed well is in a field which is under cultivation. It appears that the field was planted in oats last season.

PROPOSED SURFACE DISTURBANCE: A rectangular pad will be constructed with approximate dimensions of 350'X 160'. The pad will have a 150'X 100' extension for the reserve pit. Access will be off of an existing road.

AFFECTED FLOODPLAINS AND/OR WETLANDS: None.

FLORA/FAUNA: Oat stubble.

ENVIRONMENTAL PARAMETERS

SURFACE GEOLOGY

SOIL TYPE AND CHARACTERISTICS: Sandy-silt.

SURFACE FORMATION & CHARACTERISTICS: Quaternary Alluvium.

EROSION/SEDIMENTATION/STABILITY: No active erosion or sedimentation at present. Location will be stable.

PALEONTOLOGICAL POTENTIAL: None observed.

SUBSURFACE GEOLOGY

OBJECTIVES/DEPTHS: Green River 6100'-8700'

ABNORMAL PRESSURES-HIGH AND LOW: None anticipated.

CULTURAL RESOURCES/ARCHAEOLOGY: NA

CONSTRUCTION MATERIALS: Onsite materials will be used for construction.

SITE RECLAMATION: As per landowner instructions.

RESERVE PIT

CHARACTERISTICS: The reserve pit is rectangular in shape and divided by a central dike. The dimensions are 150'X 100'X 6'.

LINING: The reserve pit is to be lined with a synthetic liner of 12 mil minimum thickness.

MUD PROGRAM: Surface hole-gelled fresh water; Production hole-fresh water with polymer and salt for mud up as needed.

DRILLING WATER SUPPLY: Not determined at present.

OTHER OBSERVATIONS

Water was encountered near the surface when constructing the location for the Hartman 2-31A3.

STIPULATIONS FOR APD APPROVAL

Reserve pit is to be lined with a synthetic liner.

BEFORE THE BOARD OF OIL, GAS AND MINING

DEPARTMENT OF NATURAL RESOURCES

STATE OF UTAH

IN THE MATTER OF THE AMENDED	:	
PETITION OF ANR LIMITED INC.,	:	
ET AL. FOR AN ORDER MODIFYING	:	FINDINGS OF FACT,
PREVIOUS ORDERS WHICH	:	CONCLUSIONS OF LAW
ESTABLISHED DRILLING AND	:	AND ORDER
SPACING UNITS AND ANY OTHER	:	
ORDERS RELATING TO TEST WELLS	:	Docket No. 85-007
FOR THE ALTAMONT, BLUEBELL	:	Cause No. 139-42
AND CEDAR RIM-SINK DRAW	:	
FIELDS, DUCHESNE AND UINTAH	:	
COUNTIES, UTAH	:	

Pursuant to the Amended Notice of Hearing dated March 4, 1985 of the Board of Oil, Gas and Mining ("Board"), Department of Natural Resources of the State of Utah, said cause came on for hearing on Thursday, April 11, 1985 at 10:00 a.m. in the Board Room of the Division of Oil, Gas and Mining ("Division"), 355 West North Temple, 3 Triad Center, Suite 301, Salt Lake City, Utah.

The following members of the Board were present:

Gregory P. Williams, Chairman
James W. Carter
Charles R. Henderson
Richard B. Larson
E. Steele McIntyre
John M. Garr, having recused himself,
did not participate

Mark C. Moench, Assistant Attorney General, was present on behalf of the Board.

Members of the Staff of the Division present and participating in the hearing included:

Dr. Dianne R. Nielson, Director
Ronald J. Firth, Associate Director
John R. Baza, Petroleum Engineer

Barbara W. Roberts, Assistant Attorney General, was present on behalf of the Division.

Appearances were made as follows: Petitioners ANR Limited, et al., by Frank Douglass, Esq. and Ray H. Langenberg, Austin, Texas; Robert G. Pruitt, Jr., Esq., Salt Lake City, Utah; Frank J. Gustin, Esq., Salt Lake City, Utah; Louis A. Posekany, Jr., General Counsel, and George W. Hellstrom, Esq., ANR Production Company; Phillip K. Chattin, General Counsel, Utex Oil Company; Hugh C. Garner, Esq., for Coastal Oil & Gas Corporation; Phillip William Lear, Esq., for Phillips Petroleum Company; Jeffrey R. Young, Esq., for Bow Valley Petroleum, Inc.; B. J. Lewis, Esq., Vice President, and Robert W. Adkins, Esq., Linmar Energy Corporation; Robert Buettner, Esq., Koch Exploration Company; Lane Jamison, Esq., Sonat Exploration Company; Victor Brown and Robert Brown, Utah Royalty Association; John Harja, Esq., Gulf Oil Corporation; Martin Seneca, General Counsel, Ute Indian Tribe; Assad M. Raffoul, Petroleum Engineer, Bureau of Land Management; John Chasel, on his own behalf; George Morris, Esq., Ute Distribution Corporation; Dr. Gilbert Miller, Conservation Superintendent, Amarada Hess Corporation; and L. A. Pike, Roosevelt, Utah, landowner.

Now therefore, the Board having considered the testimony of the witnesses, John C. Osmond, Petroleum Geologist; Clarke Gillespie, Petroleum Reservoir Engineer; and R. Thayne Robson, Economist, for Petitioners and B. J. Lewis, Vice President, and John W. Clark, Petroleum Engineer, for Linmar Energy Corporation, and the exhibits received at said hearing and being fully advised in the premises, now makes and enters the following:

FINDINGS OF FACT

1. Due and regular notice of the time, place and purpose of the hearing was given to all interested parties as required by law and the rules and regulations of the Board.
2. The Board has jurisdiction over the matters covered by said notice and over all parties interested therein and has jurisdiction to make and promulgate any order hereinafter set forth.
3. The Board has heretofore entered 640 acre drilling and spacing orders for the Lower Green River/Wasatch Formation in Causes No. 139-3, 139-4, 139-5, 139-8, and 139-17 (Altamont Field), Causes No. 131-11, 131-14, 131-24, 131-27, 131-32, 131-33, 131-34, 131-45 and 131-55, (Bluebell Field), and Causes No. 140-6 and 140-7 (Cedar Rim-Sink Draw Field) as to the following described lands:

UINTAH SPECIAL MERIDIAN

Township 1 North, Range 1 West
Sections: 19-36

Township 1 North, Range 2 West
Sections: 19-36

Township 1 North, Range 3 West
Sections 23-26, 35 and 36

Township 1 South, Range 1 East
Sections: All (except Roosevelt Unit)

Township 1 South, Range 2 East
Sections: 4-8, 18-19, 30-31

Township 1 South, Range 1 West
Sections: All (except Roosevelt Unit)

Township 1 South, Range 2 through 4 West ?
Sections: All

Township 1 South, Range 5 West
Sections: 10-17, 20-36

Township 1 South, Range 6 West
Sections: 25-26, 35-36

Township 2 South, Range 1 through 2 East ?
Sections: All

Township 2 South, Range 1 through 6 West
Sections: All

Township 2 South, Range 7 West
Sections: 19, 30-36

Township 2 South, Range 8 West
Sections: 23-26, 31-36

Township 3 South, Range 3 West
Sections: 5-8, 17-20, 29-32

Township 3 South, Range 4 through 8 West ?
Sections: All

Township 4 South, Range 3 West
Sections: 5 and 6

Township 4 South, Range 4 West
Sections: 1-6

Township 4 South, Range 5 West
Sections: 1-6

Township 4 South, Range 6 West
Sections: 1-18

SALT LAKE MERIDIAN

Township 5 South, Range 19 East
Sections: 20-23, 26-29, 32-35

Township 6 South, Range 19 East
Sections: 3-5, 9, 10, 15, 16, 22, 27
and 34

4. In Cause No. 140-12, the Board authorized the drilling of test or second wells that may only be produced alternatively with the initial well on the same drilling unit.

5. The Lower Green River/Wasatch Formation underlying the subject fields constitutes a pool as that term is defined in Utah Code Ann. §40-6-2(9) (1953, as amended), and is a highly complex series of isolated and discontinuous beds of productive rock that are randomly distributed vertically over a several thousand feet thick interval. Normally, the productive beds are separate and distinct and not in communication with each other.

6. Many of the productive beds are not correlatable from well to well and will not afford communication between wells as close as 1000 feet. Of the productive beds that correlate, various geological factors prevent a significant number from communicating between wells within the same section.

7. Geologic and engineering information from initial unit wells and test wells show that a single well will not effectively drain the recoverable oil and gas underlying any given 640 acre spacing unit because the productive beds are too

small or have other limiting characteristics precluding effective and efficient drainage of the recoverable reserves underlying the unit.

8. Data from production logs and field performance show that test wells drilled under the Order in Cause No. 140-12 after 1978 have caused the recovery of substantial amounts of oil from separate and distinct productive beds and from previously undepleted productive beds, and that the drilling of additional wells on existing units will increase the ultimate recovery of oil from the subject fields.

9. The prohibition of simultaneous production from the initial well and test well on the same unit has caused the shutting in of wells with the potential to produce substantial amounts of additional reserves.

10. Each additional well drilled under this order will tap producing formations that are separate and distinct from and not in communication with any other producing formation and is not an unnecessary well.

11. In some areas of the subject fields, geologic, engineering, and economic factors justify drilling additional wells on existing units. In other areas, geologic, engineering and economic factors may not justify drilling additional wells on existing units.

CONCLUSIONS OF LAW

1. Due and regular notice of the time, place and

purpose of the hearing was given to all interested parties as required by law and the rules and regulations of the Board.

2. The Board has jurisdiction over the matters covered by said notice and over all parties interested therein and has jurisdiction to make and promulgate any order hereinafter set forth.

3. The Board is authorized to modify its previous orders to permit additional wells to be drilled within established units under Utah Code Ann. §40-6-6(4) (1953, as amended).

4. An order permitting (a) the drilling of additional wells on existing units as provided herein and (b) the simultaneous production of initial wells and additional wells will prevent the waste of hydrocarbons, prevent the drilling of unnecessary wells, and protect correlative rights.

ORDER

IT IS THEREFORE ORDERED:

To prevent waste of oil, gas and associated liquid hydrocarbons, to avoid the drilling of unnecessary wells, to protect correlative rights and to maintain, to the maximum extent practicable, drilling units of uniform size and shape for the promotion of more orderly development of the lands described in Finding of Fact No. 3 above, the following order is hereby promulgated to govern operations in said area effective as of April 12, 1985:

A. Upon the effective date any and all orders of the Board heretofore promulgated which are inconsistent with the orders herein set forth shall be and are hereby vacated to the extent inconsistent herewith.

B. Additional wells may be drilled, completed, and produced on established drilling units comprising government surveyed sections of approximately 640 acres (or other designated drilling units so long as such unit is at least 400 acres in size) to a density of no greater than two producing wells on each unit comprising a section (or other designated unit).

C. Additional wells may be drilled at the option of the operator of the unit, based upon geologic and engineering data for that unit which will justify the drilling of an additional well in order to recover additional oil, provided the additional well appears to be economically feasible.

D. Economically feasible means that a prudent operator would have a reasonable opportunity to recover the costs of drilling, completing, producing and operating the well, plus a reasonable profit.

E. It is not the intent of this order, in permitting additional wells to be drilled on established drilling units, to change or amend the existing contractual rights or relationships, express or implied, of any parties who share in production or the proceeds therefrom in the spaced area.

F. Any additional well must be located at least 1,320 feet from the existing well on the unit and not closer than 660

feet from the exterior boundary of the unit. No two wells may be drilled in any drilling unit within the same governmental quarter section or equivalent lot.

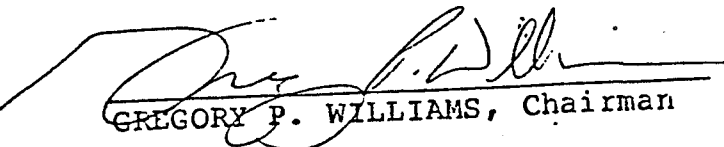
G. If an operator elects to initially complete a well solely within producing formations that are separate and distinct from and not in communication with any other producing formation, the operator will use reasonable precautions in order that such well is not completed in any producing formation that may be effectively drained by any other well.

H. Second or test wells drilled under previous orders as well as additional wells to be drilled under this order may be produced simultaneously with initial wells.

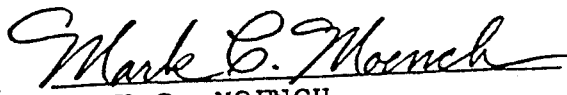
I. The Board retains exclusive and continuing jurisdiction of all matters covered by this order and of all parties affected thereby and particularly that the Board retains and reserves exclusive and continuing jurisdiction to make further orders as appropriate and authorized by statute and applicable regulations.

ENTERED this 17th day of April, 1985.

STATE OF UTAH
BOARD OF OIL, GAS AND MINING


GREGORY P. WILLIAMS, Chairman

APPROVED AS TO FORM:

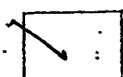

MARK C. MOENCH
Assistant Attorney General

OPERATOR Pennzoil Expl. Prod. N. 0885 DATE 3-18-91
WELL NAME Haitman 4-31A3
SEC SWNW 31 T 15 R 3W COUNTY Duchess

43-013-31308
API NUMBER

fee (4)
TYPE OF LEASE

CHECK OFF:



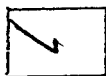
PLAT.



BOND
8106-50.80
80.000



NEAREST
WELL



LEASE



FIELD
USOM



POTASH OR
OIL SHALE

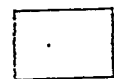
PROCESSING COMMENTS:

Water Permit

Permit 3-15-91 / Biology review 3-27-91

APPROVAL LETTER:

SPACING:



R615-2-3

N/A

UNIT



R615-3-2



139.40 4-17-85

CAUSE NO. & DATE



R615-3-3

STIPULATIONS:

1. Needs water permit
2. fee stipulation
3. Reserve pit is to be lined w/ synthetic liner of 12 mil. minimum thickness.
4. Cement behind production casing ^(5 1/2") must cover zone from 7600' to 3500'.



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
Governor

Dee C. Hansen
Executive Director

Dianne R. Nielson, Ph.D.
Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

March 29, 1991

Pennzoil Exploration & Production Company
P. O. Box 290
Neola, Utah 84053

Gentlemen:

Re: Hartman 4-31A3 Well, 2469 feet from the North line, 1037 feet from the West line, SW NW, Section 31, Township 1 South, Range 3 West, Duchesne County, Utah

Approval to drill the referenced well is hereby granted in accordance with the Order in Cause No. 139-42 dated April 17, 1985 subject to the following stipulations:

1. Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water as required by Utah Code Ann. Section 73-3, Appropriation.
2. Pennzoil Exploration & Production Company, as designated operator, is the bonded principal in reference to this Application for Permit to Drill. Should this designation change or a transfer of ownership occur, liability will remain with the designated operator until the Division is notified by letter of a new bonded principal.
3. Reserve pit is to be lined with synthetic liner of 12 mil. minimum thickness.
4. Cement behind production casing (5 1/2") must cover zone from 7600' to 3500'.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification within 24 hours after drilling operations commence.

Page 2
Pennzoil Exploration & Production Company
Hartman 4-31A3
March 29, 1991

2. Submittal of Entity Action Form 6, within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
3. Submittal of the Report of Water Encountered During Drilling, Form 7.
4. Prompt notification in the event it is necessary to plug and abandon the well. Notify R. J. Firth, Associate Director, (Office) (801) 538-5340, (Home) 571-6068, or J. L. Thompson, Lead Inspector, (Home) 298-9318.
5. Compliance with the requirements of Utah Admin. R.615-3-20, Gas Flaring or Venting.
6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of Drinking Water/Sanitation, telephone (801) 538-6159.
7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-013-31308.

Sincerely,



R. J. Firth
Associate Director, Oil & Gas

tas
Enclosures
cc: Bureau of Land Management
J. L. Thompson
we14/1-26



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Norman H. Bangerter
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Division Director

355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
801-538-5340

December 9, 1992

Pennzoil Exploration & Production Co.
P.O. Box 290
Neola, Utah 84053

Gentlemen:

Re: Hartman 4-31A3, Sec. 31, T. 1S, R. 3W, Duchesne County, Utah
API No. 43-013-31308

Due to excessive time delay in commencing drilling operations, approval to drill the subject well is hereby rescinded, effective immediately.

Please note that a new Application for Permit to Drill must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division of Oil, Gas and Mining immediately.

Sincerely,

Don Staley
Administrative Supervisor
Oil and Gas

DME/ldc
cc: R.J. Firth
Well file
WOI219